

S2

$$f(x) = x^2 - 2x - 3$$

V1

$$f(x) = (x - 1)^2 - 4$$

I5

$$f(x) = (x - 3)(x + 1)$$

D6

x-intercepts: $(3, 0)$ $(-1, 0)$

y-intercept: $(0, -3)$

vertex: $(1, -4)$

Quadruple Quadratics Matching

Match each graph to its standard form, vertex form, intercept form, and x- and y-intercepts.

Match a Quadratic Graph to its Standard, Vertex, and Intercept Form

Name Key Period _____ Date _____

Name _____

- Match each graph with its corresponding description and function in Standard Form, Vertex Form, and Intercept Form.

Graph	Standard Form	Vertex Form	Intercept Form	Description
G1	2	1	5	6
G2	5	9	2	3
G3	3	6	9	8
G4	7	5	4	4
G5	1	3	8	9
G6	6	4	7	1
G7	8	2	6	2
G8	4	7	1	5
G9	9	8	3	7

2.

- Name 1 key feature that helped you match a *graph* with *Standard Form*.

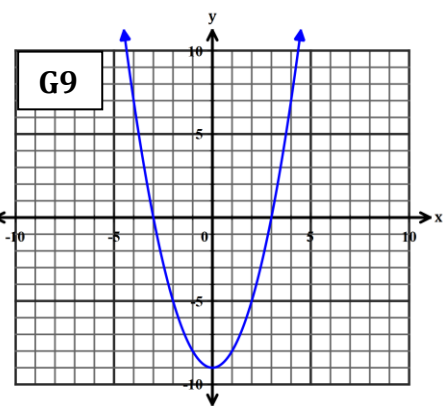
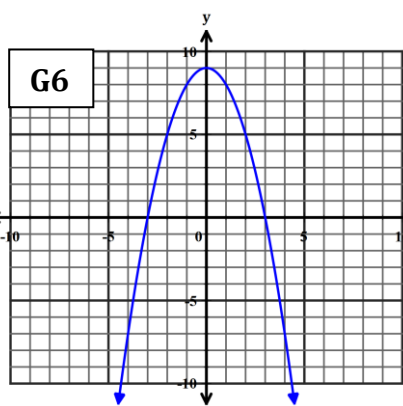
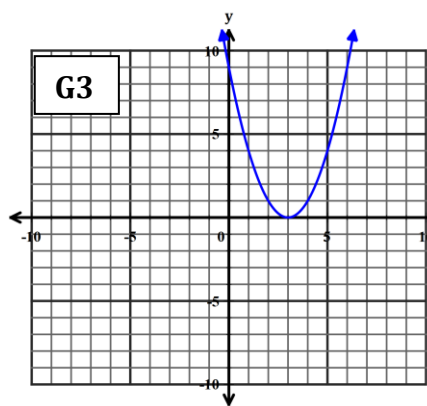
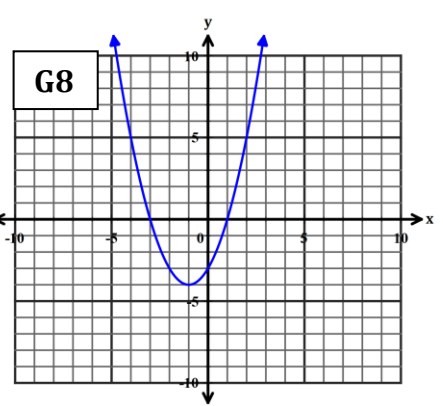
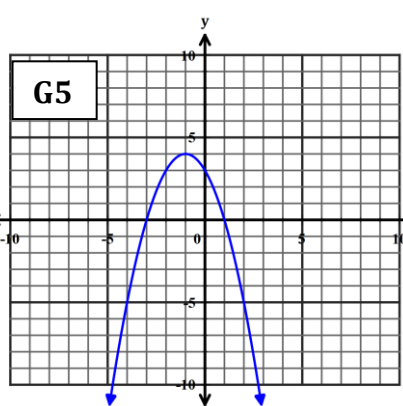
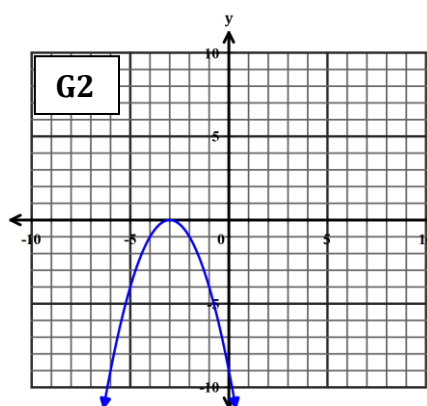
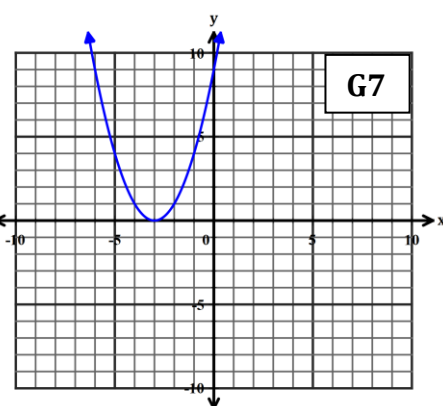
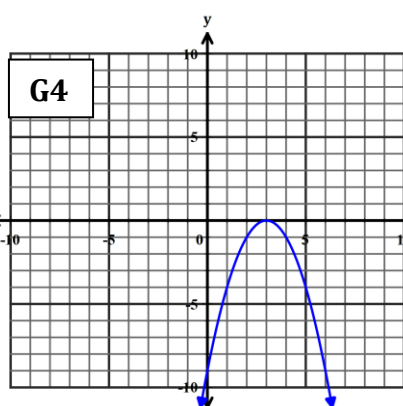
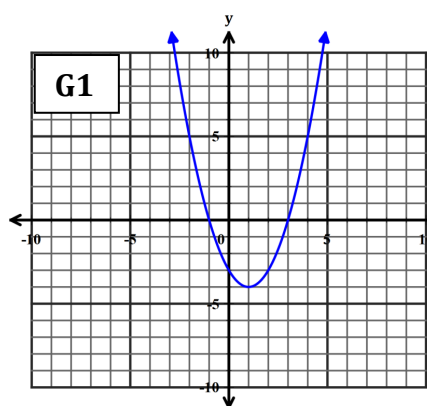
"c" is y-intercept

- Name 1 key feature that helped you match a *graph* with a *Vertex Form*.

vertex (change sign in parentheses)

- Name another key feature that helped you match *Standard Form* with a *description*.

"a" is positive (up) or negative (down)



S1

$$f(x) = -x^2 - 2x + 3$$

S4

$$f(x) = x^2 + 2x - 3$$

S7

$$f(x) = -x^2 + 6x - 9$$

S2

$$f(x) = x^2 - 2x - 3$$

S5

$$f(x) = -x^2 - 6x - 9$$

S8

$$f(x) = x^2 + 6x + 9$$

S3

$$f(x) = x^2 - 6x + 9$$

S6

$$f(x) = -x^2 + 9$$

S9

$$f(x) = x^2 - 9$$

V1

$$f(x) = (x - 1)^2 - 4$$

V4

$$f(x) = -x^2 + 9$$

V7

$$f(x) = (x + 1)^2 - 4$$

V2

$$f(x) = (x + 3)^2$$

V5

$$f(x) = -(x - 3)^2$$

V8

$$f(x) = x^2 - 9$$

V3

$$f(x) = -(x + 1)^2 + 4$$

V6

$$f(x) = (x - 3)^2$$

V9

$$f(x) = -(x + 3)^2$$

I1

$$f(x) = (x + 3)(x - 1)$$

I4

$$f(x) = -(x - 3)(x - 3)$$

I7

$$f(x) = -(x - 3)(x + 3)$$

I2

$$f(x) = -(x + 3)(x + 3)$$

I5

$$f(x) = (x - 3)(x + 1)$$

I8

$$f(x) = -(x + 3)(x - 1)$$

I3

$$f(x) = (x - 3)(x + 3)$$

I6

$$f(x) = (x + 3)(x + 3)$$

I9

$$f(x) = (x - 3)(x - 3)$$

D1

x-intercepts: $(-3, 0)$ $(3, 0)$
y-intercept: $(0, 9)$

vertex: $(0, 9)$

D4

x-intercept: $(3, 0)$
y-intercept: $(0, -9)$

vertex: $(3, 0)$

D7

x-intercepts: $(-3, 0)$ $(3, 0)$
y-intercept: $(0, -9)$

vertex: $(0, -9)$

D2

x-intercept: $(-3, 0)$
y-intercept: $(0, 9)$

vertex: $(-3, 0)$

D5

x-intercepts: $(-3, 0)$ $(1, 0)$
y-intercept: $(0, -3)$

vertex: $(-1, -4)$

D8

x-intercept: $(3, 0)$
y-intercept: $(0, 9)$

vertex: $(3, 0)$

D3

x-intercept: $(-3, 0)$
y-intercept: $(0, -9)$

vertex: $(-3, 0)$

D6

x-intercepts: $(3, 0)$ $(-1, 0)$
y-intercept: $(0, -3)$

vertex: $(1, -4)$

D9

x-intercepts: $(-3, 0)$ $(1, 0)$
y-intercept: $(0, 3)$

vertex: $(-1, 4)$